

PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Docket No: Q68486

Martin DE LOYE, et al.

Appln. No.: 10/084,432

Group Art Unit: 2617

Confirmation No.: 6237

Examiner: Willie J. DANIEL, Jr.

Filed: February 28, 2002

For: RESOURCE MANAGEMENT IN A WIRELESS CORPORATE COMMUNICATION
SYSTEM

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

Table of Contents

| | |
|---|----|
| I. REAL PARTY IN INTEREST | 3 |
| II. RELATED APPEALS AND INTERFERENCES | 4 |
| III. STATUS OF CLAIMS | 5 |
| IV. STATUS OF AMENDMENTS | 6 |
| V. SUMMARY OF THE CLAIMED SUBJECT MATTER | 7 |
| A. OVERVIEW | 7 |
| B. INDEPENDENT CLAIM 1 | 8 |
| C. INDEPENDENT CLAIM 2 | 8 |
| D. INDEPENDENT CLAIM 7 | 9 |
| E. DEPENDENT CLAIM 3 | 9 |
| F. DEPENDENT CLAIM 6 | 10 |
| G. DEPENDENT CLAIM 8 | 10 |
| H. DEPENDENT CLAIM 9 | 10 |
| VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL | 11 |
| VII. ARGUMENT | 12 |
| A. INDEPENDENT CLAIM 1 | 12 |
| 1. U.S. Patent No. 5,999,813 to Lu et al. | 12 |
| 2. U.S. Patent No. 6,771,661 to Chawla | 14 |
| B. INDEPENDENT CLAIMS 2 AND 7 | 17 |
| C. DEPENDENT CLAIM 3 | 18 |
| D. DEPENDENT CLAIMS 6, 8, AND 9 | 18 |
| E. CONCLUSION | 18 |
| CLAIMS APPENDIX | 20 |
| EVIDENCE APPENDIX | 23 |
| RELATED PROCEEDINGS APPENDIX | 24 |

I. REAL PARTY IN INTEREST

The real party in interest is ALCATEL, by virtue of an assignment executed by joint inventors Martin DE LOYE on February 7, 2002, and Jean-Francois DEPRUN on February 7, 2002, filed at the U.S. Patent and Trademark Office on February 28, 2002, and recorded by the Assignment Branch of the U.S. Patent and Trademark Office on February 28, 2002 (at Reel 012650, Frame 0029).

II. RELATED APPEALS AND INTERFERENCES

Upon information and belief, there are no other prior or pending appeals, interferences or judicial proceedings known to Appellant's representative or the Assignee that may be related to, be directly affected by, or have a bearing on the Board's decision on Appeal.

III. STATUS OF CLAIMS

Claims 1-9 constitute all currently pending claims in the present application, all of which are the subject of this appeal.

Claims 1-9 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,999,813 to Lu et al. in view of U.S. Patent No. 6,771,661 to Chawla.

All claims pending in the present application are set forth in their entirety in the attached Claims Appendix.

IV. STATUS OF AMENDMENTS

Claims 1-9 have not been amended subsequent to the Final Office Action of November 1, 2007. The claims, thus, stand as presented before the Final Office Action of November 1, 2007.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The concise description of the claimed subject matter of the present invention is set forth below with regard to certain claims at issue in this Appeal. The following discussion includes citations to various portions of the present application in order to aid in an understanding of the invention by reference to certain exemplary embodiments. These citations, unless otherwise indicated, are intended only to point out supporting exemplary embodiments and are not to be construed as limiting the scope of the claims.

A. Overview

The present invention relates to a wireless corporate communication system and to resource management in such a system.

Conventional wireless corporate communication systems allocate a predefined or fixed amount of resources for calls established from either a public communication network or a private communication network. The allocated resources, therefore, do not closely match the requirements of each terminal making or receiving a call. In particular, since the resource requirements of a terminal may vary throughout a communication, the amount of resources allocated remains constant. Thus, the use and allocation of resources is poorly optimized in conventional systems. Further, more resources may be allocated to an internal corporate network than to a public corporate network, or vice versa, and the allocations cannot be changed according to changing circumstances.

In certain non-limiting exemplary embodiments of the invention, systems and methods are provided to overcome these drawbacks by, in part, by providing a private branch exchange which comprises a component for controlling the amount of resources allocated to each terminal,

and a base station communicating with the terminals which can send information to the terminals indicating the amount of resources allocated to them. These features provide a variety of advantages and benefits over the conventional systems described above.

The above description, however, is only a short overview of a few of the features of certain exemplary embodiments of the invention, which may assist in an understanding of the claims.

B. Independent claim 1

Independent claim 1 is directed to “[a] wireless corporate communication system.” (E.g., Specification at p. 4, ll. 8-15.)

The system comprises “a private branch exchange,” (e.g., id. at p. 4, l. 10; p. 5, ll. 3-9 and 20-23; p. 6, ll. 2-4, 11-13, and 18-23) “at least one base station coupled with said private branch exchange,” (e.g., id. at p. 4, l. 10; p. 5, ll. 6-9; p. 6, ll. 2-4, 14-18, and 28-29) and “a plurality of corporate radio terminals under the range of said base station, (e.g., id. at p. 4, ll. 10-11; p. 5, l. 3 to p. 6, l. 4) wherein the private branch exchange comprises the means-plus-function element “means for controlling the amount of resources allocated to each of said corporate radio terminals,” (e.g., id. at p. 5, ll. 3-11; p. 6, l. 29; p. 7, l. 27 to p. 9, l. 4) and the base station comprises the means-plus-function element “means for sending a message indicating to said corporate radio terminals the amount of resources they are allocated” (e.g., id. at p. 8, l. 26 to p. 9, l. 4).

C. Independent claim 2

Independent claim 2 is directed to “[a] private branch exchange adapted to be coupled to a base station, said private branch exchange comprising a switch establishing communications

to/from corporate radio terminals located under the range of said base station.” (E.g., Specification at p. 2, l. 14 to p. 3, l. 19.)

The private branch exchange comprises the means-plus-function element “means for controlling the amount of resources allocated to each of said corporate radio terminals;” (e.g., id. at p. 5, ll. 3-11; p. 6, l. 29; p. 7, l. 27 to p. 9, l. 4) and the means-plus-function element “means for sending messages to said base station comprising the amount of resources allocated to each of said corporate radio terminal,” (e.g., id. at p. 5, ll. 6-9) “wherein said base station sends a message which indicates to each of said corporate radio terminals the amount of resources it is allocated” (e.g., id. at p. 8, l. 26 to p. 9, l. 4).

D. Independent claim 7

Independent claim 7 is directed to a “[b]ase station adapted to be coupled to a private branch exchange.” (E.g., Specification at p. 2, l. 14 to p. 3, l. 19.)

The base station comprises “a module for sending messages to corporate radio terminals under the range of said base station indicating the amount of resources each of said corporate radio terminal is allocated,” (e.g., id. at p. 8, l. 26 to p. 9, l. 4)

“said amount of resources being determined by said private branch exchange” (e.g., id. at p. 5, ll. 3-11; p. 6, l. 29; p. 7, l. 27 to p. 9, l. 4; p. 8, l. 26 to p. 9, l. 4).

E. Dependent claim 3

Claim 3 depends from claim 2, and further comprises “a database storing user profiles of said corporate radio terminals;” (e.g., Specification at p. 7, ll. 11-28) “said amount of resources allocated to a corporate radio terminal depending on the profile of said corporate radio terminal stored in said database” (e.g., id. at p. 8, ll. 2-5).

F. Dependent claim 6

Claim 6 depends from claim 2, and further requires that “said amount of resources allocated to a corporate radio terminal is dynamically updated during a communication to/from said corporate radio terminal” (e.g., Specification at p. 5, ll. 20-23).

G. Dependent claim 8

Claim 8 depends from claim 1, and further requires that “the amount of resources allocated to each of said corporate radio terminals is dynamically updated during a communication to/from said corporate radio terminal” (e.g., Specification at p. 5, ll. 20-23).

H. Dependent claim 9

Claim 9 depends from claim 7, and further requires that “said amount of resources is dynamically updated during a communication to/from said corporate radio terminal” (e.g., Specification at p. 5, ll. 20-23).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

There is only one issue in this appeal: whether claims 1-9 are improperly rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,999,813 to Lu et al. in view of U.S. Patent No. 6,771,661 to Chawla.

For the purposes of this appeal, independent claims 1, 2 and 7 stand together. Additional arguments are presented in particular for dependent claims 3, 6, 8, and 9.

VII. ARGUMENT

Claims 1-9 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,999,813 to Lu et al. (“Lu”) in view of U.S. Patent No. 6,771,661 to Chawla (“Chawla”). Appellant traverses this rejection for at least the following reasons.

A. Independent Claim 1

Claim 1 requires a “private branch exchange” which “comprises means for controlling the amount of resources allocated to each of said corporate radio terminals.” Claim 1 further requires that a “base station comprises means for sending a message indicating to said corporate radio terminals the amount of resources they are allocated.” In the amendment of August 17, 2007, Appellant asserted that the above-quoted elements of claim 1 are not taught by Lu or Chawla. In particular, Appellant noted the Examiner’s statement that “Lu does not specifically disclose having [this] feature.” Appellant further extensively set forth the deficiencies of Chawla with respect to these features of claim 1.

In the “Response to Arguments” section of the Office Action of November 1, 2007, the Examiner appears to assert that both Lu and Chawla disclose the above quoted features of claim 1.

1. U.S. Patent No. 5,999,813 to Lu et al.

In the Office Action of November 1, 2007, the Examiner associates element 206 of Lu with the private branch exchange of claim 1. The Examiner asserts that the radio resource manager 254 of Lu controls the amount of resources allocated to terminals 212. The Examiner further asserts that the BTS 210 of Lu corresponds to the base station of claim 1, and provides resources to mobile units 212. Even if these assertions of the Examiner were accepted,

arguendo, the acts of controlling or allocating the amount of resources for terminals, or of providing resources to terminals, are still distinct from the requirement of claim 1 which recites “sending a message indicating to said corporate radio terminals the amount of resources they are allocated.” As previously asserted in the Amendment of August 17, 2007, sending a message to terminals indicating the amount of those resources that are allocated to the terminals is not strictly necessary simply in order to allocate those resources. Thus, sending such a message is not inherent to resource allocation.

In the Office Action of November 1, 2007, the Examiner cites a number of portions of Lu in support of the argument that the above quoted features of claim 1 are taught by Lu. None of the cited portions of Lu, however, appear to teach or suggest “sending a message indicating to said corporate radio terminals the amount of resources they are allocated.”

For example, col. 18, lines 44-60 of Lu describe how the “hybrid network 500” allocates resources to non-native handsets and native MS units, but fails to describe any message being sent to the non-native handsets or MS units which “indicat[es] . . . the amount of resources they are allocated.”

Col. 6, lines 44-55 of Lu describe the cellular CPBX system, and describe how the CPBX network 200 may be coupled to a public network 202.

Col. 7, lines 4-10 of Lu simply state that a CPBX subsystem 206, a BSC subsystem 208, a BTS subsystem 210, and MS units 212 and 214, are within standalone CPBX network 200.

Col. 8, lines 11-24 and 41-47 of Lu describe an enhancement to the control over resources of the private standalone CPBX network, which permits an operator to tailor the private network resources to the number of MS units that are registered.

Col. 10, lines 1-3 merely state that private MSC block 254 handles mobility management and radio resource management with the help of the PBX 256.

Col. 5, lines 16-28 of Lu describe transceiver units 160 and 162 which output bearer data at 8 Kbps or 16 Kbps for various types of communications. This portion also states that transceiver units output signaling information “which is packet information that is forwarded either to antenna subsystem 158 for transmitting to the MSs or to a base station control function (BCF) 166 for communicating with a base station controller (BSC) or a mobile services switching center (MSC).” Nothing in this portion of Lu appears to teach or suggest “sending a message indicating to said corporate radio terminals the amount of resources they are allocated.”

Finally, the cited Figs. 3A through 4A and 7 merely show the construction or interrelation of components of the network, and fail to show particular types of communication or messages between the BTS 210 and the terminals 212 or 214. These figures, therefore, cannot be construed to teach or suggest what sort of information is contained in any messages.

Thus, although Lu does appear to disclose a private branch exchange, a base station, and terminals, as well as allocation of resources to the terminals, Lu fails to teach or suggest that a base station “comprises means for sending a message indicating to said corporate radio terminals the amount of resources they are allocated.”

2. U.S. Patent No. 6,771,661 to Chawla

In the Office Action of November 1, 2007, the Examiner again cites exactly the same portions of Chawla which were extensively addressed in the Amendment of August 17, 2007. “Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant’s argument and answer the substance of it.” MPEP

§ 707.07(f) (8th ed. Rev. 6, Sept. 2007) (emphasis added). The Examiner also fails to address Appellant's assertion, set forth in the Amendment of August 17, 2007, that although Chawla describes configuring data communications devices with bandwidth allocation information at col. 10, line 65 - col. 11, line 34, Chawla clearly distinguishes between data communication devices and terminals 210-215, and therefore does not teach or suggest configuring the terminals 210-215 with bandwidth allocation information. Since the Examiner failed to address this matter in accordance with MPEP § 707.07(f), the finality of the Office Action of November 1, 2007 was premature.

Finally, in the same Office Action, the Examiner includes a number of speculative statements asserting that the above-described feature of claim 1 is inherent to Chawla. It is well-settled that for a claimed limitation to be inherent in a teaching, it must be shown that "the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." E.g., Ex parte Levy, 17 USPQ2d 1461, 1464 (U.S. PTO Bd. of Pat. App. & Interf. 1990) (emphasis in original). As noted in MPEP § 2112[IV], "[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art" (emphasis modified) (citations omitted).

In the Office Action of November 1, 2007, the Examiner asserts that Chawla's disclosure of a computer terminal performing high speed backup which requires 4 Mbps of bandwidth for one period and 2 Mbps of bandwidth for another period inherently requires that the computer terminal "must know how much bandwidth is allocated in order to perform backup;" however, the cited portion of Chawla, col. 13, lines 28-42, merely suggests that the bandwidth amounts of

4 Mbps and 2 Mbps are the bandwidths required to complete the backup within a certain time period. As one of ordinary skill in the art would recognize, a computer terminal need not have knowledge of the amount of bandwidth available in order to perform communications over a network. Ordinarily, computer terminals perform communications over a network without such information, and the throughput of communications will simply vary over time depending upon available network resources, network traffic, or allocated bandwidth, without receiving any message from a base station indicating the amount of bandwidth “allocated” to them. Thus, one of ordinary skill in the art would not consider this feature of claim 1 to be strictly necessary for such a backup.

The Examiner next speculates that a computer terminal having a modem for communicating over the internet requires a meter indicating transmission parameters such as data and/or baud rate. This statement is merely speculative and fails to support the notion that a computer terminal must necessarily be sent a message indicating the amount of resources it is allocated.

The Examiner further speculates that a communication terminal may receive a busy signal “which corresponds to no resources available.” Such a feature is not evident in any of the portions of the references cited by the Examiner, and is not necessarily present in every communication system. Furthermore, even if such a busy signal were to be taught, it would merely indicate a temporarily high level of traffic, and not necessarily indicate the amount of resources allocated to a terminal by a “means for controlling the amount of resources allocated” in an private branch exchange, as required by claim 1.

Thus, the speculative statements addressed above fail to rise to the level of a sufficient “basis or reasoning” to support the Examiner’s assertion of inherency, as they do not show that the required features of claim 1 “necessarily flow[] from the teachings of the applied art.” Moreover, if the Examiner intends to rely upon official notice, the Examiner is respectfully requested to provide references in support of the argument, as the MPEP clearly states that “[i]t would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known.” MPEP § 2144.03[A].

Furthermore, in the Advisory Action of February 27, 2008, the Examiner includes statements which do not appear to add anything substantive to the Examiner’s previous statements in the above-mentioned Office Actions. It should simply be restated that claim 1 requires the “amount of resources . . . allocated” be sent in a message to the terminals; thus, no simple acknowledgment or reservation of resources, without sending a message including the amount, can be construed to teach or suggest this requirement of claim 1.

Thus, Lu and Chawla, alone or in combination, fail to teach or suggest each and every element of independent claim 1. These references, therefore, fail to render claim 1 unpatentable. Accordingly, Appellant respectfully requests that the rejection of independent claim 1 and its dependent claim 8 be withdrawn.

B. Independent Claims 2 and 7

Independent claims 2 and 7 recite features similar to those of independent claim 1. Claims 2 and 7 are, therefore, also patentable at least for reasons analogous to those presented

above with respect to independent claim 1. Accordingly, Appellant respectfully requests that the rejection of independent claims 2 and 7, and their dependent claims 3, 4-6, and 9, be withdrawn.

C. Dependent Claim 3

With respect to dependent claim 3, the Examiner asserts that the feature “said amount of resources allocated to a corporate radio terminal depending on the profile of said corporate radio terminal stored in said database” is inherent to the teaching of Chawla. Although Chawla appears to describe a table 400, Chawla fails to teach or suggest that this table contains “user profiles of said corporate radio terminals” or that the amount of resources allocated to a corporate radio terminal “depend[s] on the profile . . . stored in said database.” Thus, for this additional reason Appellant respectfully requests that the rejection of claim 3 be withdrawn.

D. Dependent Claims 6, 8, and 9

With respect to dependent claims 6, 8, and 9, in the Office Action of November 1, 2007 the Examiner also asserts, without pointing to any particular section of Chawla, that the system of Chawla “automatically and dynamically adjusts the amount of bandwidth for communication sessions according to situations such as times or events.” Appellant, however, fails to find such a teaching or suggestion in either Lu or Chawla. Appellant, therefore, respectfully submits that neither reference teaches or suggests “automatically and dynamically” adjusting the amount of bandwidth. Thus, for this additional reason Appellant respectfully requests that the rejection of dependent claims 6, 8, and 9 be withdrawn.

E. Conclusion

This Appeal Brief is being filed via the USPTO Electronic Filing System (EFS). Appellant herewith petitions the Director of the USPTO to extend the time for filing this Appeal

Brief for an appropriate length of time if necessary. Any fee due under 37 C.F.R. §41.37(a) and 37 U.S.C. § 1.17(c) is being paid via the USPTO Electronic Filing System (EFS).

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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Date: June 18, 2008

CLAIMS APPENDIX

CLAIMS 1-9 ON APPEAL:

1. (Previously presented) A wireless corporate communication system comprising:

a private branch exchange, at least one base station coupled with said private branch exchange, and a plurality of corporate radio terminals under the range of said base station, wherein

said private branch exchange comprises means for controlling the amount of resources allocated to each of said corporate radio terminals; and

said base station comprises means for sending a message indicating to said corporate radio terminals the amount of resources they are allocated.

2. (Previously presented) A private branch exchange adapted to be coupled to a base station, said private branch exchange comprising a switch establishing communications to/from corporate radio terminals located under the range of said base station, wherein said private branch exchange comprises:

means for controlling the amount of resources allocated to each of said corporate radio terminals; and

means for sending messages to said base station comprising the amount of resources allocated to each of said corporate radio terminal, wherein said base station sends a message which indicates to each of said corporate radio terminals the amount of resources it is allocated.

3. (Original) Private branch exchange according to claim 2, further comprising a database storing user profiles of said corporate radio terminals; said amount of resources allocated to a corporate radio terminal depending on the profile of said corporate radio terminal stored in said database.

4. (Original) Private branch exchange according to claim 2, wherein said amount of resources allocated to a corporate radio terminal communicating with a public communication network over said corporate communication system depends on the effective amount of data destined to said corporate radio terminal and received at the interface between said corporate communication system and said public communication network.

5. (Original) Private branch exchange according to claim 2, wherein said amount of resources allocated to a corporate radio terminal depends on the amount of traffic in said private branch exchange.

6. (Original) Private branch exchange according to claim 2, wherein said amount of resources allocated to a corporate radio terminal is dynamically updated during a communication to/from said corporate radio terminal.

7. (Previously presented) Base station adapted to be coupled to a private branch exchange comprising a module for sending messages to corporate radio terminals under the range of said base station indicating the amount of resources each of said corporate radio terminal is allocated, said amount of resources being determined by said private branch exchange.

8. (Previously presented) The wireless corporate communication system of claim 1, wherein the amount of resources allocated to each of said corporate radio terminals is dynamically updated during a communication to/from said corporate radio terminal.

9. (Previously presented) The base station of claim 7, wherein said amount of resources is dynamically updated during a communication to/from said corporate radio terminal.

EVIDENCE APPENDIX

Pursuant to 37 C.F.R. § 41.37(c)(1)(ix), submitted herewith are copies of any evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other evidence entered by the Examiner and relied upon by Appellant in the appeal.

NONE

RELATED PROCEEDINGS APPENDIX

Submitted herewith are copies of decisions rendered by a court or the Board in any proceeding identified about in Section II pursuant to 37 C.F.R. § 41.37(c)(1)(ii).

NONE

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SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents
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Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. The USPTO is directed and authorized to charge the statutory fee of \$510.00, and all other required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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